OPTIONAL INFORMATION	
Name of School:	Date of Inspection:
Vocational Program/Course/Room:	Signature of Inspector:

ELECTRICAL COMPONENTS AND EQUIPMENT FOR GENERAL USE
SELF INSPECTION CHECKLIST

Guidelines: This checklist covers some of the regulations issued by the U.S. Department of Labor - OSHA under Subpart S - 29 CFR 1910.305 and which were adopted by reference. It also deals with selected regulations from N.J.A.C. 5:18-2.9 issued by the New Jersey Department of Community Affairs Bureau of Fire Safety. It applies to all electrical utilization systems. This checklist does not cover: installations in ships, watercraft, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles. This checklist also does not apply to conductors that are an integral part of factory assembled equipment. **The questions that are most likely not the responsibility of the individual teacher are marked with an asterisk (*) next to the number of the question.** Questions marked with the symbol (☞) may require the help of an outside expert. Definitions of underlined terms are provided at the end of the checklist to help you understand some of the questions. Any question marked with the symbol (☹) indicates a history of previous violations in vocational schools.

Regulations dealing with open wiring on insulators; pull and junction boxes for systems over 600 volts; portable cables over 600 volts; transformers; and capacitors have not been addressed in this checklist. If this condition is encountered, consult the OSHA regulations in 29 CFR 1910.305.

Cabinets, Boxes, and Fittings

Please Circle

1. Are conductors entering boxes, cabinets or fittings protected from abrasion? [29 CFR 1910.305(b)(1)] Y N N/A DK

Comments/Corrective Action

2.☹	Are openings through which conductors enter effectively closed? [29 CFR 1910.305(b)(1)] Note: Unused openings in cabinets, junction boxes and fittings shall be effectively closed.	Y N N/A DK
3.☹	Are all pull boxes, junction boxes and fittings provided with covers approved for that purpose? [29 CFR 1910.305(b)(2)]	Y N N/A DK
4.	Are metal covers used grounded? [29 CFR 1910.305(b)(2)]	Y N N/A DK
5.☹	Does each outlet box have a cover, faceplate, or fixture canopy? [29 CFR 1910.305(b)(2)]	Y N N/A DK
6.	Do all covers of outlet boxes having holes through which flexible cord pendants pass have bushings designed for the purpose or have smooth, well-rounded surfaces on which the cords may bare? [29 CFR 1910.305(b)(2)]	Y N N/A DK
7.	Are all electrical wall receptacles tight-fitting and in good physical condition? [N.J.A.C. 5:18-2.9(a)7 with NFPA 70]	Y N N/A DK

Switches

8.	Are single-throw knife switches so connected that the blades are dead when the switch is in the open position? [29 CFR 1910.305(c)(1)] Note: These types of switches are to be accessible to only qualified persons.	Y N N/A DK
9.	Are single-throw knife switches so placed so that gravity will not tend to close them? [29 CFR 1910.305(c)(1)]	Y N N/A DK

Comments/Corrective Action

10. Are single-throw knife switches which are approved for use in the inverted position provided with a locking device that will ensure that the blades remain in the open position when so set? [29 CFR 1910.305(c)(1)] Y N N/A DK

11.☹ Are flush snap switches that are mounted in ungrounded metal boxes and located within reach of conducting floors or other conducting surfaces provided with face plates of nonconducting, noncombustible material? [29 CFR 1910.305(c)(2)] Y N N/A DK

Note: Light switches need a cover plate.

Switchboards and Panelboards

12. Are panelboards mounted in cabinets, cutout boxes, or enclosures approved for the purpose and of the dead front type? [29 CFR 1910.305(d)] Y N N/A DK

Enclosures for Damp or Wet Locations

13.☹ Are cabinets, cutout boxes, fittings, boxes, and panelboard enclosures in damp or wet locations installed so as to prevent moisture or water from entering and accumulating within the enclosures? [29 CFR 1910.305(e)] Y N N/A DK

14. Is water leakage into light receptacles or fixtures which may cause a fire hazard immediately repaired? [N.J.A.C. 5:18-2.9(a)7 with NFPA 70] (Look for evidence of water leakage.) Y N N/A DK

Comments/Corrective Action

Conductors For General Wiring

15. Are all conductors used for general wiring insulated? [29 CFR 1910.305(f)] Y N N/A DK

16. Is the insulation of the type that is approved for the voltage, operating temperature, and location of use? [29 CFR 1910.305(f) and NFPA 70 (NEC)] Y N N/A DK

17. Is the insulated conductor so distinguished by appropriate color or other suitable means as being the grounded conductor, ungrounded conductor, or equipment grounding conductors? [29 CFR 1910.305(f)] Y N N/A DK

Flexible Cords and Cables

18. Are flexible cords and cables prohibited from being used as a substitute for fixed wiring of a structure; where attached to building surfaces; where concealed or where run through holes in walls, ceilings, or floors; or where run through doorways, windows or similar openings? [29 CFR 1910.305(g)(1)(ii) and N.J.A.C. 5:18-2.9(a)7 with NFPA 70] Y N N/A DK

    Note: Flexible cords and cables may only be used for pendants; wiring of fixtures; connection of portable lamps or appliances; elevator cables; wiring of cranes and hoists; connection of stationary equipment to facilitate their frequent interchange; prevention of the transmission of noise or vibration; appliances where the fastening means and mechanical connections are designed to permit removal for maintenance and repair; or data processing cables approved as a part of the data processing system.

Comments/Corrective Action

19.☹	Are flexible cords used only in continuous lengths without splices or tap? [29 CFR 1910.305(g)(2)(ii)]	Y	N	N/A	DK
20.☹	Are flexible cords connected to devices and fittings so that the strain relief is provided to prevent pull from being directly transmitted to joints or terminal screws? [29 CFR 1910.305(g)(2)(iii)]	Y	N	N/A	DK
21.	Are all wires located away from walking areas to prevent a tripping hazard? [N.J.A.C. 5:18-2.9(a)7 with NFPA 70] Note: Flexible cords used by shops for portable equipment are recommended to be designed for hard or extra hard usage.	Y	N	N/A	DK

Equipment for General Use
Lighting Fixtures, Lampholders, Lamps, and Receptacles

22.	Are fixtures lamp holders, lamps, rosettes and receptacles so designed and maintained that no live parts can expose students and teachers to contact? [29 CFR 1910.305(j)(1)(I)]	Y	N	N/A	DK
23.	Are hand lamps of the portable type supplied through flexible cords equipped with a handle of molded composition or other material approved for the purpose and a substantial guard attached to the lamp holder or the handle? [29 CFR 1910.305(j)(1)(ii)]	Y	N	N/A	DK
24.	Is the use of multiple plug receptacles prohibited? [N.J.A.C. 5:18-2.9(a)7 with NFPA 70]	Y	N	N/A	DK

Comments/Corrective Action

Equipment For General Use
Receptacles, Cord Connectors, and Attachment Plugs (caps)

25.	Are receptacles, cord connectors and attachment plugs so constructed so that no receptacle or cord connector will accept an attachment plug with a different voltage or current rating than that for which the device is intended? [29 CFR 1910.305(j)(2)]	Y	N	N/A	DK
26.☹	Are receptacles installed in wet or damp locations suitable for that location? [29 CFR 1910.305(j)(2)(ii)] Note: Ground-fault circuit interrupters would be a good idea in these types of locations.	Y	N	N/A	DK

Equipment for General Use
Appliances

27.	Are appliances so designed and maintained that they have no live parts normally exposed to student and teacher contact? [29 CFR 1910.305(j)(3)(I)]	Y	N	N/A	DK
28.	Are means provided to disconnect each appliance? [29 CFR 1910.305(j)(3)(ii)]	Y	N	N/A	DK
29.	Is each appliance marked with its rating in volts and amperes or volts and watts? [29 CFR 1910.305(j)(3)(iii)]	Y	N	N/A	DK
30.	Are electrical appliances in good operational condition? [N.J.A.C. 5:18-2.9(a)7 with NFPA 70]	Y	N	N/A	DK

Comments/Corrective Action

Equipment for General Use
Motors

31.*	Is the disconnecting means located in sight from the controller location? [29 CFR 1910.305(j)(4)(ii)]	Y	N	N/A	DK
32.*☞	Does the disconnecting means disconnect the motor and the controller from all ungrounded supply conductors and is it so designed that no pole can be operated independently? [29 CFR 1910.305(j)(4)(ii)(b)] Note: If a motor and the driven machinery are not in sight from the controller location, 29 CFR 1910.305(j)(4)(ii)(C) gives the specifications which must be complied with in this circumstance.	Y	N	N/A	DK
33.*☞	Are motors, motor control apparatus and motor branch-circuit conductors protected against overheating due to motor overload or failure to start, and against short-circuits or ground faults? [29 CFR 1910.305(j)(4)(iii)]	Y	N	N/A	DK
34.	Are exposed live parts of motors and controllers operating at 50 volts or more between terminals guarded against accidental contact? [29 CFR 1910.305(j)(4)(iv)]	Y	N	N/A	DK

Storage Batteries

35.	Is sufficient diffusion and ventilation provided to storage batteries to prevent the accumulation of explosive mixtures? [29 CFR 1910.305(j)(7)]	Y	N	N/A	DK

Comments/Corrective Action

Definitions:

Controller means a device or group of devices that serves to govern, in some predetermined manner, the electric power delivered to the apparatus to which it is connected.

Cutout Box means an enclosure designed for surface mounting and having swinging doors or covers secured directly to and telescoping with the walls of the box proper.

Dead Front means without live parts exposed to a person on the operating side of the equipment.

Panelboard means a single or group of panel units designed for assembly in the form of a single panel; including buses, automatic overcurrent devices, and with or without switches for the control of light, heat, or power circuits; designed to be placed in a cabinet or cutout box placed in or against a wall and accessible only from the front.